# Reply to Office Action dtd. 09 September 2005

### **Amendments to the Claims**

This listing of claims will replace all previous versions, and listings, of claims in the application.

- 1. (currently amended) An interface system for monitoring a number of channels in a communications system having at least one group of a number of nodes, each node having a number of channels, the interface system comprising:
  - a switch for controlling a spectrum analyzer interface with the nodes;
  - a processor electrically coupled to a local interface;
  - a memory electrically coupled to the local interface;
  - a display device electrically coupled to the local interface; and
  - object-oriented warning interface logic stored on the memory and executable

by the processor to control the switch and the spectrum analyzer, the warning interface logic including:

- logic to enable creation of, based upon user input data, and display of a test plan and a channel plan corresponding to at least one node encompassing all expected values for each service to be operated on said node;
- logic to generate on the display device a channel percent advisory indicator on the display device within a channel level interface component upon an occurrence of an advisory event in a channel associated therewith, and a group percent advisory indicator in a group level interface component associated with the at least one group upon an occurrence of an advisory event in a channel associated with the at least one group;
- logic to generate on the display device a channel critical alarm indicator on the display device within a channel level interface component upon an occurrence of a critical event in a channel associated therewith, and a group critical alarm indicator in a group level interface component associated with the at least one group upon an occurrence of a critical event in a channel associated with the at least one group; and

logic to conduct automatic, periodic testing of signal characteristics of the at

least one node according to the channel plan and the test plan; and
logic to conduct more frequent testing of selected nodes associated with a
prior occurrence of advisory events or critical events, the more
frequent testing in a prioritized node order based upon the current and
historical number of alarm-triggering test measurements associated
with the selected nodes, and upon the percentage of test measurements
outside of an acceptable ranged for the selected nodes.

- 2. (canceled)
- 3. (original) The system of claim 1, wherein the warning interface logic further comprises logic to generate a node percent advisory indicator on the display device in a node level interface component associated with one of the nodes upon an occurrence of an advisory event in a channel associated with the one of the nodes.
- 4. (canceled)
- 5. (original) The system of claim 1, wherein the warning interface logic further comprises logic to generate a node critical alarm indicator on the display device in a node level interface component associated with one of the nodes upon an occurrence of a critical event in a channel associated with the one of the nodes.

#### 6-10. (canceled)

11. (currently amended) In a system including a spectrum analyzer and a local interface to which are electrically coupled a switch for controlling the spectrum analyzer, a processor, a memory, and a display device, the memory having stored on it object-oriented warning interface logic executable by the processor to control the switch and the spectrum analyzer, an interface method for monitoring a number of channels in a communications system having at least one group of a number of nodes, each node having a number of channels, the interface method comprising the steps of:

creating, based upon user input data, and displaying a test plan and a channel plan

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corresponding to at least one node encompassing all expected values for each service to be operated on said node;

conducting automatic, periodic testing of signal characteristics of the at least one node according to the channel plan and the test plan;

conducting more frequent testing of selected nodes associated with a prior

occurrence of advisory events or critical events, the more frequent testing in a

prioritized node order based upon the current and historical number of alarmtriggering test measurements associated with the selected nodes, and upon the
percentage of test measurements outside of an acceptable ranged for the
selected nodes;

generating on the display device during automated channel testing a channel percent advisory indicator on a display device within a channel level interface component upon an occurrence of an advisory event in a channel associated therewith, and a group percent advisory indicator in a group level interface component associated with the at least one group upon an occurrence of an advisory event in a channel associated with the at least one group; and generating on the display device during automated channel testing a channel critical alarm indicator on the display device within a channel level interface

component upon an occurrence of a critical event in a channel associated therewith, and a group critical alarm indicator in a group level interface component associated with the at least one group upon an occurrence of a critical event in a channel associated with the at least one group.

## 12. (canceled)

13. (original) The method of claim 11, further comprising the step of generating a node percent advisory indicator on the display device in a node level interface component associated with one of the nodes upon an occurrence of an advisory event in a channel associated with the one of the nodes.

#### 14. (canceled)

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15. (original) The method of claim 11, further comprising the step of generating a node critical alarm indicator on the display device in a node level interface component associated with one of the nodes upon an occurrence of a critical event in a channel associated with the one of the nodes.

16-17. (canceled)